

Work Order ID 126730

Monday, November 24, 2014 10:07:23 AM

126730

Page 1

Item ID: K591-113 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Short Step Instln
 Start Date: 11/24/2014 Start Qty: 10.00 ***10*** Cust Item ID:
 Required Date: 11/24/2014 Req'd Qty: 10.00 ***10*** Customer:
 Reference:

Approvals: Process Plan: MLJ Date: 14-11-24 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
DSI9525	A		SMB				MLJ	1501-30	(LO)
104	Pick Kit	0.00							
104									
Packaging	Memo	0.00							
Packaging									
105	QC4- 100% Inspect kits for completeness	0.00							
105									
QC	Memo	0.00							
Quality Control									
110	Identify as per dwg & Stock Location: <u>328</u>	0.00							
110									
Packaging	Memo	0.00							
Packaging	***CHG005***								

10 SMB
 10X
 4
 SMB
 DAS
 46
 9-89
 JAN 30 2015
 JAN 30 2015
 10
 DAS
 05
 9-89
 FEB 02 2015

POP 126727

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐															
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐															
Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design ☐									
Doc/Data ☐									
Equip/Tooling ☐									
Handling/Pre ☐									
Material ☐									
Operator ☐									
Offset/Setup ☐									
Process ☐									
Supplier ☐									
Training ☐									
Transport ☐									
Unapproved ☐									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
--	--	---	--

Work Order ID 126730

Monday, November 24, 2014 10:07:23 AM

126730

Page 2

Item ID: K591-113 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Short Step Instln
Start Date: 11/24/2014 Start Qty: 10.00 ***10*** Cust Item ID:
Required Date: 11/24/2014 Req'd Qty: 10.00 ***10*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC21- Final Inspection - Work Order Release	0.00							
120									
QC	Memo	0.00							
Quality Control									

MLJ 1502-03
MF
15-2-2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Crosstube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐
--	--	---

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
--	--	---	--

Picklist Print

Monday, November 24, 2014 10:07:26 AM

Page 1

Work Order ID: 126730

126730

Parent Item: K591-113

K591-113

Parent Item Name: Short Step Instln

Start Date: 11/24/2014

Required Date: 11/24/2014

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP: C04.11.09ReformatKJ/JLM
as per revG DD 10.04.20 verified by:EC
586 10.06.18 DD verf:EC

IPP Rev:D
IPP Rev:E as per ECN10-

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D2171		Manufactured	No			104	Each	23.0000	2	20			
-------	--	--------------	----	--	--	-----	------	---------	---	----	--	--	--

D2171

Clamp

DAS
46
9-89

**

Sh/S
JAN 30 2015

DAS
06
9-89

Location

Loc Qty

Loc Code

ST542

23

B157M1
15131289

20

120583

9

124525

14

D2274

Manufactured No

104

Each

710.0000

4

40

D2274

Radius Block

DAS
46
9-89

**

Sh/S
JAN 30 2015

DAS
06
9-89

Location

Loc Qty

Loc Code

FG

12

86855

12

ST006

59

109534

6

110264

2

112466

2

117869

49

ST012a

639

121589

273

124265

366

40

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐															
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐															
Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
--	--	---	--

Picklist Print

Monday, November 24, 2014 10:07:26 AM

Page 2

Work Order ID: 126730

126730

Parent Item: K591-113

K591-113

Parent Item Name: Short Step Instln

Start Date: 11/24/2014

Required Date: 11/24/2014

Start Qty: 10.00

Required Qty: 10.00

D2182B

Manufactured No

104 f

190.4280 0.5833 6

D2182B

Seal(\$Per Foot)

DAS

46

9-89

**

ShrB
JAN 30 2015

Location

Loc Qty

Loc Code

ST411

190.428

101827

1

108914

2.71

115189

186.718

(D2182B035) CUT 2 AT 3.50"

D2362-3

Manufactured No

104 Each

8.0000 1 10

D2362-3

Step Support Bracket

DAS

46

9-89

**

ShrB
JAN 30 2015

Location

Loc Qty

Loc Code

ST537

8

124123

2

125664

6

104 Each

58.0000 1 10

D3595-200-300

Manufactured No

D3595-200-300

Rubber Cushion

DAS

46

9-89

**

ShrB
JAN 30 2015

Location

Loc Qty

Loc Code

FG

5

84209

5

ST411

53

119161

53

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐															
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐															
Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
--	--	---	--

Picklist Print

Monday, November 24, 2014 10:07:26 AM

Page 3

Work Order ID: 126730

126730

Parent Item: K591-113

K591-113

Parent Item Name: Short Step Instln

Start Date: 11/24/2014

Required Date: 11/24/2014

Start Qty: 10.00

Required Qty: 10.00

AN3-37A

Purchased

No

104

Each

140.0000

2 20

AN3-37A

DAS
46
9-89

Bolt

**

Smb
JAN 30 2015

Location

Loc Qty

Loc Code

FG

10

119086

10

ST347

130

m130325

30

m130466

100

AN4-21A

Purchased

No

104

Each

16.0000

4 40

AN4-21A

DAS
46
9-89

Bolt

**

Smb
JAN 30 2015

Location

Loc Qty

Loc Code

ST342

16

m127817

16

AN4-22A

Purchased

No

104

Each

304.0000

1 10

AN4-22A

DAS
46
9-89

Bolt

**

Smb
JAN 30 2015

Location

Loc Qty

Loc Code

GA

50

116419

50

ST342

254

118628

2

120930

4

123348

100

m128403

148

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Crosstube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐															
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐															
Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design ☐									
Doc/Data ☐									
Equip/Tooling ☐									
Handling/Pre ☐									
Material ☐									
Operator ☐									
Offset/Setup ☐									
Process ☐									
Supplier ☐									
Training ☐									
Transport ☐									
Unapproved ☐									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
--	--	---	--

Picklist Print

Monday, November 24, 2014 10:07:26 AM

Page 4

Work Order ID: 126730

126730

Parent Item: K591-113

K591-113

Parent Item Name: Short Step Instln

Start Date: 11/24/2014

Required Date: 11/24/2014

Start Qty: 10.00

Required Qty: 10.00

NAS1149D0363J

Purchased

No

104

Each

1,767.000

4 40

NAS1149D0363.J

Washer

DAS
46
9-89

**

Smb
JAN 30 2015

Location

Loc Qty

Loc Code

GA	7	
124392	7	
ST260a	600	
m130799	600	
ST269	183	
m123441	5	
m130358	178	
ST510a	977	
m128429	977	

NAS1149D0463J

Purchased

No

104

Each

7,101.000

6 60

NAS1149D0463.J

WASHER

DAS
46
9-89

**

Smb
JAN 30 2015

Location

Loc Qty

Loc Code

CA	459	
M129682	459	
ST260a	6523	
M129390	1593	
M130799	4930	
ST269	119	
16941	8	
M126221	20	
M127813	6	
M127904	16	
M128591	44	
M128995	25	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐															
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐															
Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design ☐									
Doc/Data ☐									
Equip/Tooling ☐									
Handling/Pre ☐									
Material ☐									
Operator ☐									
Offset/Setup ☐									
Process ☐									
Supplier ☐									
Training ☐									
Transport ☐									
Unapproved ☐									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
--	--	---	--

Picklist Print

Monday, November 24, 2014 10:07:26 AM

Page 5

Work Order ID: 126730

126730

Parent Item: K591-113

K591-113

Parent Item Name: Short Step Instln

Start Date: 11/24/2014

Required Date: 11/24/2014

Start Qty: 10.00

Required Qty: 10.00

MS21042L3

Purchased

No

104

Each

1,878.000

20

20

MS21042L3

DAS
46

Nut

9-89

Smb
15/1/30

Location

Loc Qty

Loc Code

FP001

500

M130922

500

ST305

1378

123900

215

M127410

11

M127831

41

M128401

34

M128754

77

M130799

1000

[M131264]

20



DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td style="width: 25%;">Skid-tube ☐</td> <td style="width: 25%;">Crosstube ☐</td> <td style="width: 25%;">Water Jet ☐</td> <td style="width: 25%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐															
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐															
Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
--	--	---	--

Picklist Print

Monday, November 24, 2014 10:07:26 AM

Page 6

Work Order ID: 126730

126730

Parent Item: K591-113

K591-113

Parent Item Name: Short Step Instln

Start Date: 11/24/2014

Required Date: 11/24/2014

Start Qty: 10.00

Required Qty: 10.00

MS21042L4

Purchased

No

104

Each

4,399.000

5

50

MS21042L 4

Locknut

DAS
46
9-89

Location

Loc Qty

Loc Code

ST007

12

121444

12

ST260a

2000

m130799

2000

ST273A

894

m129934

894

ST305

1493

111827

2

126275

5

m126015

12

m126275

39

m127255

63

m127376

9

m127813

741

m128300

69

m129472

53

m130922

500

SmB
15/1/29

DAS
46
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐															
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐															
Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
--	--	---	--

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D350-591 REV. G
AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D350-591 REV. 3
REF TCCA STC: SH92-6
REF FAA STC: SH967NE

PURPOSE:

TO PROVIDE AN OPTIONAL CUSHION KIT TO BE INSTALLED ON THE D350-591-111A/-113/-115/-117A/-119 *Heli-Access-Step™* (THE D2856-400-720 ABRASION STRIP IS REPLACED WITH THE D3595-200-300 CUSHION).

CHANGE:

FOR D350-591-111A/-113/-115 @ CHG 005 (OR LATER), D350-591-117A @ CHG 003 (OR LATER) AND D350-591-119 @ CHG 004 (OR LATER), THE PARTS LIST OF INSTALLATION INSTRUCTIONS D350-591 AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D350-591 IS AMENDED AS FOLLOWS:

QTY -111A	QTY -113	QTY -115	QTY -117A	QTY -119	Part Number	Description
X					D350-591-111A	Heli-Access-Step™, Long Step – High Skid
	X				D350-591-113	Heli-Access-Step™, Short Step – High Skid
		X			D350-591-115	Heli-Access-Step™, Short Step – Low Skid
			X		D350-591-117A	Heli-Access-Step™, Pre-Flight Step
				X	D350-591-119	Heli-Access-Step™, Long Step – Low Skid
	1				D2310	STEP ASSEMBLY (HIGH-SHORT)
1					D2311	STEP ASSEMBLY (HIGH-LONG)
		1			D2354	STEP ASSEMBLY (LOW-SHORT)
				1	D2355	STEP ASSEMBLY (LOW-LONG)
4	2	2	2	2	D2171	CLAMP
4	2	2	2	2	D2182B035	CUSHION
8	4	4	4	4	D2274	RADIUS BLOCK
			1		D2362-041	SUPPORT BRACKET
2	1			1	D2362-3	SUPPORT BRACKET
		1			D2362-5	SUPPORT BRACKET
2	1	1	1	1	D3595-200-300	CUSHION (NEW)
2	2	2		2	AN3-37A	BOLT
		4			AN4-20A	BOLT (REPLACED, WAS AN4-16A)
8	4			4	AN4-21A	BOLT (REPLACED, WAS AN4-20A)
1	1	1	4	1	AN4-22A	BOLT
4	4	4		4	NAS1149D0363J	WASHER (OR AN960JD10)
10	6	2	4	6	NAS1149D0463J	WASHER (OR AN960JD416)
		4			NAS1149D0416J	WASHER (OR AN960JD416L)
2	2	2		2	MS21042L3	NUT
9	5	5	4	5	MS21042L4	NUT

SHOP COPY
RETURN TO
ENGINEERING
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 126730-05
14-11-24

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED
BY: 
D. SHEPHERD (DE # 02)

DATE: 10.06.08
CERT. NO.: SH92-6
ISSUE NO.: 11

A	NEW ISSUE.	JPH	10.06.08
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9525	SHEET 1 OF 4
APPROVED		TITLE	SCALE
DE APPR.		STEP CUSHION CHANGE	NTS
DATE	10.06.08	COPYRIGHT © 2010 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

THE DSI-9525-XXX KITS THAT ARE AVAILABLE FROM DART TO UPGRADE THE D350-591-111A/-113/-115 KITS @ CHG 004 (OR EARLIER), THE D350-591-117A KIT @ CHG 002 (OR EARLIER) AND THE D350-591-119 KIT @ CHG 003 (OR EARLIER) ARE AS FOLLOWS:

QTY -011	QTY -013	QTY -015	QTY -017	Part Number	Description
X				DSI-9525-011	STEP CUSHION KIT (FOR D350-591-111A)
	X			DSI-9525-013	STEP CUSHION KIT (FOR D350-591-113/-119)
		X		DSI-9525-015	STEP CUSHION KIT (FOR D350-591-115)
			X	DSI-9525-017	STEP CUSHION KIT (FOR D350-591-117A)
2	1	1	1	D3595-200-300	CUSHION
		4		AN4-20A	BOLT
8	4			AN4-21A	BOLT
			4	AN4-22A	BOLT
8	4	4	4	NAS1149D0463J	WASHER (OR AN960JD416)
8	4	4	4	MS21042L4	NUT

INSTRUCTIONS:

TO INSTALL THE D3595-200-300 CUSHION:

1. REMOVE THE STEP PER ICA-D350-591 SECTION 32.2
2. REMOVE THE D2856-400-720 ABRASION STRIP PER ICA-D350-591 SECTION 32.4
3. POSITION THE D3595-200-300 CUSHION AS INDICATED ON SHEET 3 OR 4 (AS APPLICABLE) OF THIS SERVICE INSTRUCTION.
4. REINSTALL THE STEP PER ICA-D350-591 SECTION 32.1 AS APPLICABLE USING THE NEW HARDWARE PROVIDED AS SHOWN ON SHEET 3 OR 4 (AS APPLICABLE) OF THIS SERVICE INSTRUCTION.

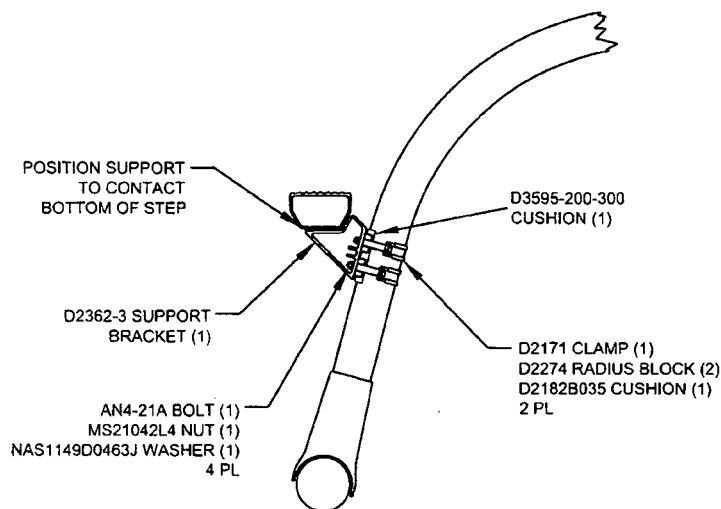
WEIGHT AND BALANCE:

THERE IS A NEGLIGIBLE WEIGHT INCREASE WITH THIS MODIFICATION.

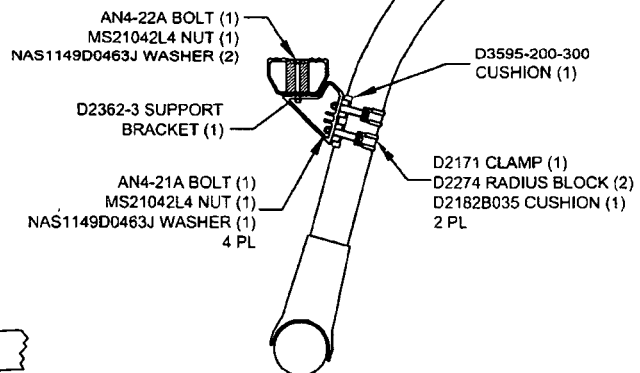
CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED
BY: 
D. SHEPHERD (DE # 02)
DATE: 10.06.08
CERT. NO.: SH92-6
ISSUE NO.: 11

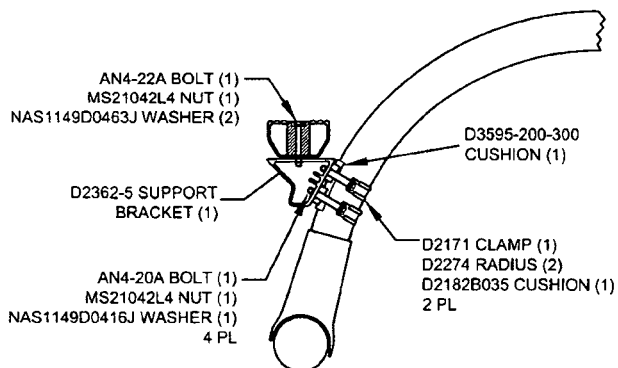
DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9525	SHEET 2 OF 4
APPROVED		TITLE	SCALE
DE APPR.		STEP CUSHION CHANGE	NTS
DATE	10.06.08	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



SECTION C-C: CENTER SUPPORT
(D350-591-111A ONLY)
(NOT TO SCALE)



SECTION D-D: AFT ATTACHMENT
(D350-591-111A/-113/-119 ONLY)
(NOT TO SCALE)



SECTION E-E: AFT ATTACHMENT
(D350-591-115 ONLY)
(NOT TO SCALE)

FIGURE 32-9: Crosstube Attachment
REF ICA-D350-591

FIGURE 9: Crosstube Attachment
REF D350-591

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-0-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 10.06.08
CERT. NO.: SH92-6
ISSUE NO.: 11

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9525	SHEET 3 OF 4
APPROVED		TITLE	SCALE
DE APPR.		STEP CUSHION CHANGE	NTS
DATE	10.06.08	COPYRIGHT © 2010 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

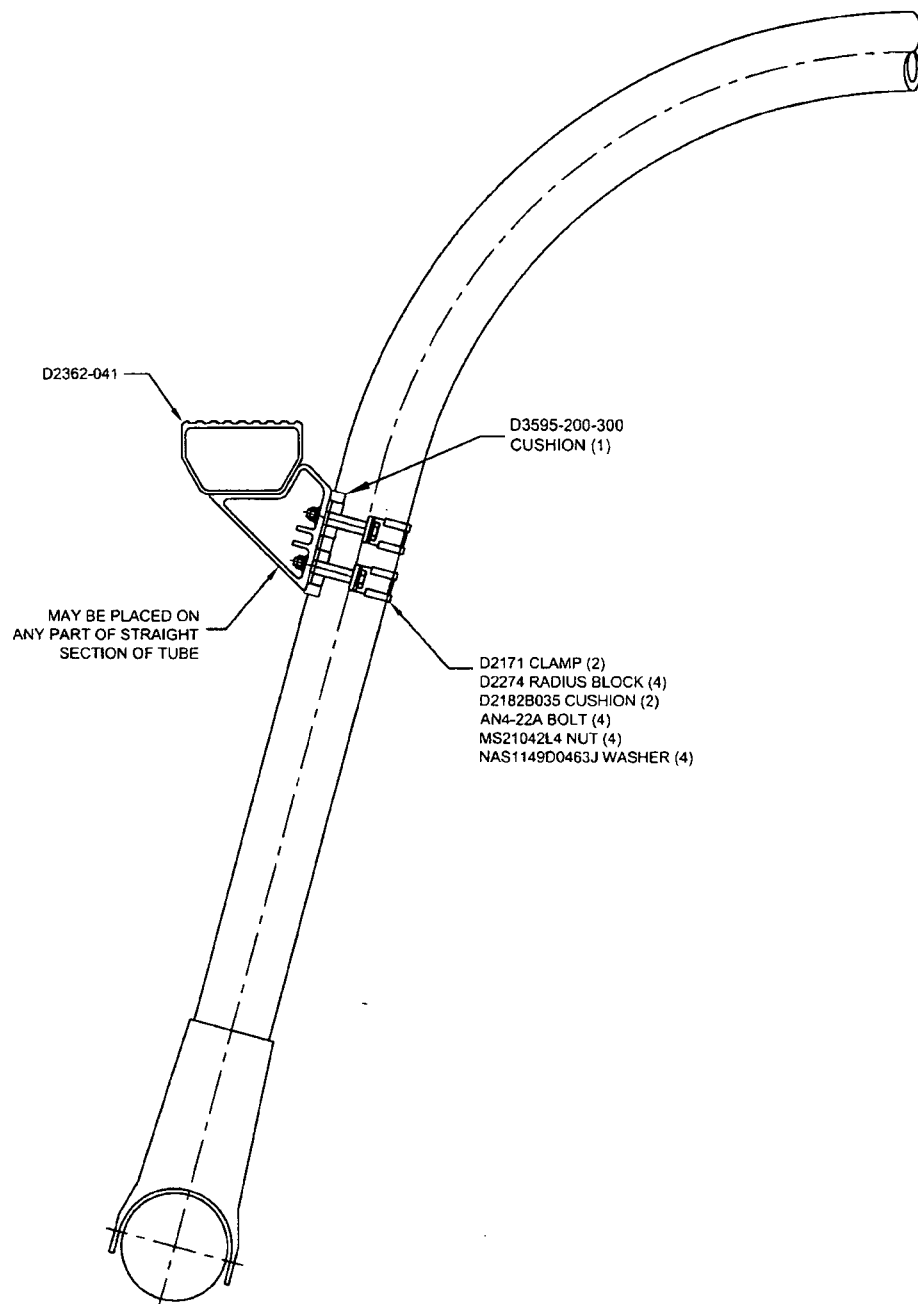


FIGURE 32-10: D350-591-117A Heli-Access-Step™, Pre-Flight Step

REF ICA-D350-591

FIGURE 10: D350-591-117A Heli-Access-Step™, Pre-Flight Step

REF D350-591

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 10.06.08
CERT. NO.: SH92-6
ISSUE NO.: 11

DESIGN	<i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>[Signature]</i>		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9525	SHEET 4 OF 4
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	STEP CUSHION CHANGE	NTS
DATE	10.06.08	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D350-591 REV. G
AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D350-591 REV. 3

REF TCCA STC: SH92-6

REF FAA STC: SH967NE

PURPOSE:

TO PROVIDE AN OPTIONAL CUSHION KIT TO BE INSTALLED ON THE D350-591-111A/-113/-115/-117A/-119 *Heli-Access-Step™* (THE D2856-400-720 ABRASION STRIP IS REPLACED WITH THE D3595-200-300 CUSHION).

CHANGE:

FOR D350-591-111A/-113/-115 @ CHG 005 (OR LATER), D350-591-117A @ CHG 003 (OR LATER) AND D350-591-119 @ CHG 004 (OR LATER), THE PARTS LIST OF INSTALLATION INSTRUCTIONS D350-591 AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D350-591 IS AMENDED AS FOLLOWS:

QTY -111A	QTY -113	QTY -115	QTY -117A	QTY -119	Part Number	Description
X					D350-591-111A	Heli-Access-Step™ Long Step – High Skid
	X				D350-591-113	Heli-Access-Step™ Short Step – High Skid
		X			D350-591-115	Heli-Access-Step™ Short Step – Low Skid
			X		D350-591-117A	Heli-Access-Step™ Pre-Flight Step
				X	D350-591-119	Heli-Access-Step™ Long Step – Low Skid
	1				D2310	STEP ASSEMBLY (HIGH-SHORT)
1					D2311	STEP ASSEMBLY (HIGH-LONG)
		1			D2354	STEP ASSEMBLY (LOW-SHORT)
				1	D2355	STEP ASSEMBLY (LOW-LONG)
4	2	2	2	2	D2171	CLAMP
4	2	2	2	2	D2182B035	CUSHION
8	4	4	4	4	D2274	RADIUS BLOCK
			1		D2362-041	SUPPORT BRACKET
2	1			1	D2362-3	SUPPORT BRACKET
		1			D2362-5	SUPPORT BRACKET
2	1	1	1	1	D3595-200-300	CUSHION (NEW)
2	2	2		2	AN3-37A	BOLT
		4			AN4-20A	BOLT (REPLACED, WAS AN4-16A)
8	4			4	AN4-21A	BOLT (REPLACED, WAS AN4-20A)
1	1	1	4	1	AN4-22A	BOLT
4	4	4		4	NAS1149D0363J	WASHER (OR AN960JD10)
10	6	2	4	6	NAS1149D0463J	WASHER (OR AN960JD416)
		4			NAS1149D0416J	WASHER (OR AN960JD416L)
2	2	2		2	MS21042L3	NUT
9	5	5	4	5	MS21042L4	NUT

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED
BY: 
D. SHEPHERD (DE # 02)

DATE: 10.06.08
CERT. NO.: SH92-6
ISSUE NO.: 11

A	NEW ISSUE.	JPH	10.06.08
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9525	SHEET 1 OF 4
APPROVED		TITLE	SCALE
DE APPR.		STEP CUSHION CHANGE	NTS
DATE	10.06.08	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	